

apex, rugose striate on basal half, rugose beyond, most finely so at apex; two well-developed keels from lateral margins at base, converging strongly for a short distance and then running parallel to beyond basal third of abdomen; ovipositor concealed.

Black; scape red; legs red, the posterior coxae black above; wings hyaline; stigma and veins dark brown; abdomen with more than basal third testaceous, except for a blackish spot at middle of basal margin; remainder of abdomen black.

*Type-locality*.—Ngerengere, Tanganyika.

*Paratype-locality*.—Tsumeb, Southwest Africa.

*Type*.—U. S. N. M. No. 50019.

Described from two female specimens reared from *Audeoudia halica* Meyrick living in the seed capsules ("jumping beans") of Euphorbiaceae, and communicated by Dr. H. Sachtleben, of the Deutsches Entomologisches Institut, Berlin-Dahlem. The paratype has been deposited in that institution. It differs from the type in having all coxae black.

#### NOTOTHRIPS FOLSOMI, A NEW GENUS AND SPECIES OF THYSANOPTERA FROM THE UNITED STATES.

By J. DOUGLAS HOOD, *University of Rochester.*

Exactly twenty-seven years ago, Dr. Justus W. Folsom, known for his embryological work on the segmentation of the insect head, for his taxonomic studies on Collembola, and as the author of the first modern text-book of entomology, suggested to me that the Thysanoptera might be studied to advantage, and gave me a small collection of thrips which he had accumulated while a graduate student at Harvard University. During the years which followed, he and the late Charles A. Hart, both at Illinois, taught me the fundamentals of entomology, directed me in what was then a little-frequented byway of entomological endeavor, and firmly suppressed all near-attempts at premature publication. A superb artist himself, he stressed the superiority of illustrations over mere words in all morphological papers. In these days, when so many of the new specific names proposed are patronymics, it is perhaps necessary to state the foregoing in detail, the better to emphasize the appreciation felt and the signal compliment intended in dedicating *Notothrips folsomi* to him.

#### NOTOTHRIPS, gen. nov.

(*νῶτος*, the back—in allusion to the dorsally pigmented and sculptured body;  
*θρίψ*, a wood worm.)

Dorsal surface of entire body roughly sculptured, excepting in the area of

the white stripe on each side of prothorax and abdomen. Head longer than broad, longer than prothorax, with a conspicuous groove extending forward from the anterior ocellus. Cheeks set with a few small setigerous tubercles. Mouth cone nearly pointed, almost attaining posterior margin of prothorax. Prothorax with two major setæ on epimeron. Wings always present, not narrowed at middle. Fore tarsus unarmed in female, armed in male with a distinct tooth. Sternum of eighth and ninth abdominal segments of male longer than tergum, the anterior margin prolonged forward, that of VIII only slightly, that of IX to form a conspicuous, slightly up-turned lobe within the body. (See Plate 9, figures 3 and 4.)

*Genotype.*—*Phlæothrips vittatus* Hood.

To this genus, in addition to the genotype, is assigned the new species described below; and to it may possibly also belong *Phlæothrips albovittatus* Schille, 1910, described and known from two specimens only, both females, taken in Poland. Closely related though it is to *Phlæothrips* Haliday (= *Phlæothrips*, Uzel, emend.), this new genus must be segregated not so much because of the sculpture and the striking color pattern which have suggested the generic name as because of the two large setæ, instead of one, on the proepimeron and the peculiar modification of the ninth sternal sclerite of the male. In the latter respect it shows a close approximation to Priesner's genus *Odontinothrips* which, however, in common with all its relatives, excepting the African genus *Pselaphothrips* possesses only one major seta on the epimeral plate of the prothorax.

***Notothrips folsomi*, sp. nov.**

(Pl. 9, figs. 3 and 4; Pl. 10, fig. 4.)

*Male* (macropterous).—Length about 2.0 mm. Dorsal surface closely reticulate, non-shining; ventral surface smooth. General color by *reflected* light, dark mahogany brown, with a narrow, latero-dorsal, white stripe extending along each side of the prothorax and abdominal segments 2-7, terminating in a white spot at the base of segment 8; this white stripe is hardly as wide as the antenna, and is interrupted only on the pterothorax and first abdominal segment, where it is entirely wanting. General color by *transmitted* light yellowish brown, with almost unbroken red subhypodermal pigmentation; legs and tube blackish brown, non-pigmented; antennæ nearly concolorous with legs, segments 3-8 slightly paler, 3 yellow in basal third, 4-6 with yellow pedicels; wings of fore pair clouded with brown in the region of the subbasal setæ.

Head (Pl. 9, fig. 3) about 1.25 times as long as greatest width; dorsal and lateral surfaces closely and distinctly reticulate, and with several moderately prominent setigerous tubercles, of which three or four may be seen in profile on each cheek; postocular setæ minute; cheeks only slightly rounded, converging abruptly to eyes, narrowing to base. Eyes moderately large, finely faceted, contained in length of head about 2.8 times, and very slightly narrower than their interval. Ocelli nearly equidistant, opposite center of eyes. Antennæ seven-fourths the

length of head; form of segments and chaetotaxy shown in illustration (Pl. 9, fig. 4); sense-cones disposed as in genotype. Mouth cone nearly attaining base of prosternum.

Prothorax (Pl. 9, fig. 3) along median dorsal line about 0.54 as long as head, and (including coxæ) fully twice as wide as long, dorsal surface closely reticulate excepting in the areas occupied by the white stripes; all usual setæ present, dilated apically, two pairs on the epimeron. Wings long and strong, the fore pair somewhat wider distally than at middle and with about 16 accessory hairs on posterior margin; subbasal setæ stout and blunt. Legs normal; fore femora not swollen, fore tarsi armed with a short tooth.

Abdomen normal; segment 9 moderately long and with the anterior margin of its sternum prolonged forward to form a conspicuous, slightly up-turned lobe within the body (Pl. 9, fig. 4). Tube about 0.73 as long as head.

Measurements of holotype ( $\sigma$ ): Length 2.04 mm.; head, length 0.286 mm., width behind eyes 0.228 mm., width at base 0.206 mm.; eyes, length 0.100 mm., width 0.068 mm., interval 0.072 mm.; prothorax, median dorsal length 0.164 mm., width across coxæ 0.342 mm.; pterothorax, width 0.388 mm.; abdomen, width across segment 2, 0.402 mm.; tube, length 0.210 mm., width at base 0.091 mm., width at apex 0.040 mm.

Antennal segments:.....	1	2	3	4	5	6	7	8
Length ( $\mu$ ):.....	44	64	92	76	72	60	52	39
Width ( $\mu$ ):.....	40	33	40	38	34	28	24	15
Total length of antenna 0.5 mm.								

Described from one male taken by the author at Fraser, Colorado, July 8, 1927, from a dead pine branch infested with scolytid beetles [Hood No. 613].

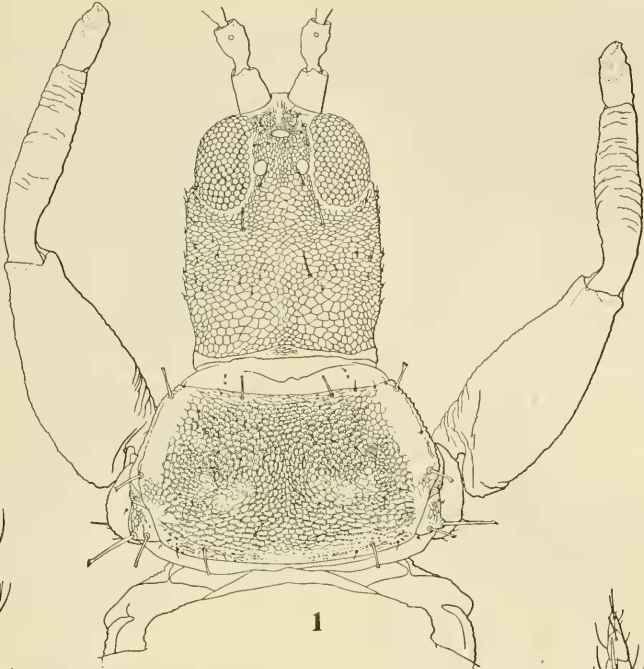
This is a smaller and much less strongly sculptured species than *N. vittatus*. The pronotum and tube are distinctly shorter in comparison with the head, and the intermediate antennal segments, as may be seen by comparing figures 2 and 4 on Plate 9, are relatively much shorter and stouter.

#### *Notothrips vittatus* (Hood).

(Pl. 9, figs. 1, 2; Pl. 10, figs. 1-3.)

1912. *Phlaeothrips vittatus* Hood, Proc. Biol. Soc. Washington, Vol. XXV, p. 11. [2 $\sigma$ , Baldwin, Mich., on poplar.]  
 1927. *Phlaeothrips vittatus*, Hood, Ent. Amer., Vol. VII, p. 229. [1 $\varphi$ , Parkers, Lewis Co., N. Y., on poplar.]  
 1928. *Phlaeothrips vittatus*, Hood and Herrick, Mem. 101, Cornell Univ. Agr. Exp. Sta., p. 71.

This strikingly colored species, as will be noted from the above citations, is known from three specimens only, two of them males taken in Michigan, one a female from New York. In July and August, 1930, 1931, and 1932, I found it quite commonly at



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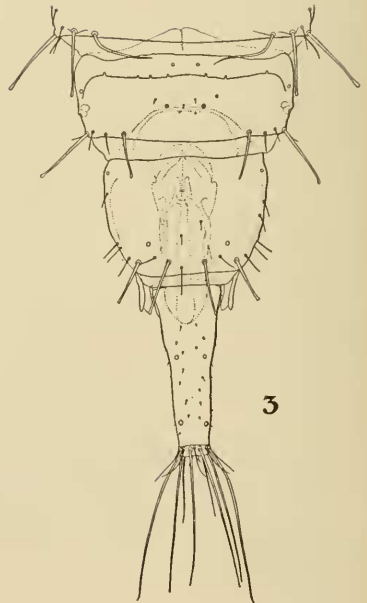
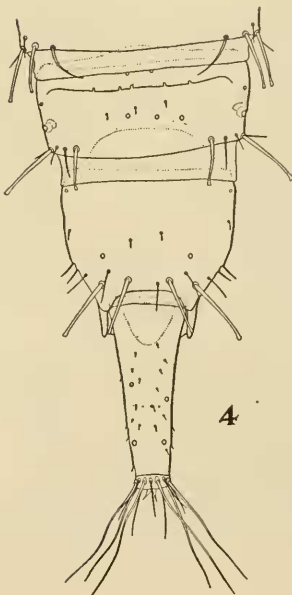
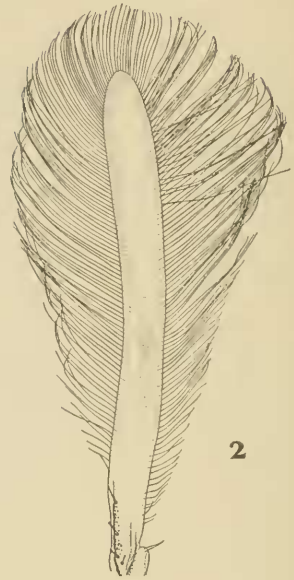
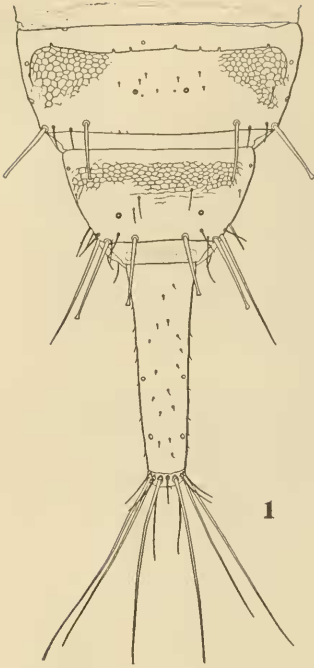
2



3



4



Oswegatchie, N. Y., on dying poplar trees (*Populus tremuloides*). On bright warm afternoons individuals could be seen alighting in company with *Acanthothrips nodicornis* (Reuter) on poplars which had been blown down several weeks previously. They were evidently attracted by the noticeable odor of decomposition. Like that species they are very alert and, when approached, are prone to drop to the ground or to fly away if successful in spreading their wings. Though hundreds of adult specimens were seen, nymphs could not be found.

EXPLANATION OF PLATES.

(The drawings were made with the aid of a camera lucida by Miss Helen E. Rearwin.)

PLATE 9.

- Fig. 1. *Notothrips vittatus* (Hood), head and prothorax, ♀; setae omitted from all appendages and from mesothorax.  
 Fig. 2. *Notothrips vittatus*, right antenna, ♀.  
 Fig. 3. *Notothrips folsomi* sp. nov., head and prothorax, ♂, holotype; setae omitted from all appendages and from mesothorax; facets of eyes and some of cephalic structure not shown because of opacity of specimen.  
 Fig. 4. *Notothrips folsomi*, left antenna, ♂, holotype.

PLATE 10.

- Fig. 1. *Notothrips vittatus* (Hood), segments 8-10 of abdomen, ♀.  
 Fig. 2. *Notothrips vittatus*, right fore wing, ♀; stippling indicates color pattern.  
 Fig. 3. *Notothrips vittatus*, segments 8-10 of abdomen, ♂, showing the prolongation cephalad of sternum IX.  
 Fig. 4. *Notothrips folsomi* sp. nov., segments 8-10 of abdomen, ♂; certain details shown in Fig. 3 omitted because of opacity of specimen.

PHLEPSIUS ISHIDAE MATSUMURA IN NORTH AMERICA.

By P. W. OMAN, *Bureau of Entomology*.

*Phlepsius ishidae* Matsumura. Monographie der Jassinen Japan. Termesz. Fuz., vol. 25, pp. 382-383, 1902.

*Phlepsius tinctorius* Sanders and DeLong. Ann. Ent. Soc. Amer., vol. 12, pp. 235-236, 1919.

This interesting leafhopper was described by Matsumura from Japanese specimens in 1902 and was recorded from North America in 1919 by Sanders and DeLong when they described it as *Phlepsius tinctorius*. Since the writer first examined specimens of the species he has considered it exotic, and upon investigation found that it checked well with Matsumura's description and figures of *Phlepsius ishidae* from Japan. Subsequently, Japanese specimens determined by Matsumura as